

ETS STANDARDS FOR QUALITY AND FAIRNESS

Adopted by the Board of Trustees



Educational Testing Service • Princeton, New Jersey

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PREFACE

In the following resolution, dated October 6, 1981, the Board of Trustees of Educational Testing Service provided for standards for quality and fairness applicable to all ETS activities:

BE IT HEREBY RESOLVED that the Board of Trustees of the Educational Testing Service

1. Adopts as ETS policy and approves as *ETS Standards for Quality and Fairness* the principles and policies previously set forth by ETS management in its publication entitled *Principles, Policies and Procedural Guidelines Regarding ETS Products and Services*;
2. Endorses the procedural guidelines developed and published by management to implement these principles and policies;
3. Directs management to continue its program of monitoring adherence to the procedural guidelines across ETS programs and services, to revise the guidelines as appropriate, and to make an annual report to the Board regarding such efforts;
4. Authorizes management to provide for alternative procedures which can accomplish or hold promise of accomplishing the principles and policies included in the Standards and to make provision for small, new, or specialized programs that have special needs; and
5. Directs the Trustee Committee on Public Responsibility to prepare annually an accountability report, to be released publicly, which evaluates actions taken by ETS in accordance with the *ETS Standards for Quality and Fairness*.

The Standards are designed to ensure that ETS products and services meet demonstrable criteria with respect to seven areas of basic importance: Accountability, Confidentiality of Data, Product Accuracy and Timeliness, Research and Development, Tests and Measurement, Test Use, and Public Information. The first three sections of the Standards deal with issues that relate to all ETS activities: the responsibilities of ETS to those affected by its activities; the rights to and limitations on access to data collected by ETS; and the control of quality and performance according to commitments. The remaining sections concern issues relating to ETS's main endeavors: Research and Development, Tests and Measurement, Test Use, and Public Information.

The Standards are drawn from particular circumstances and needs at ETS and reflect its objectives. Because of their origin and purposes, the Standards may

iv

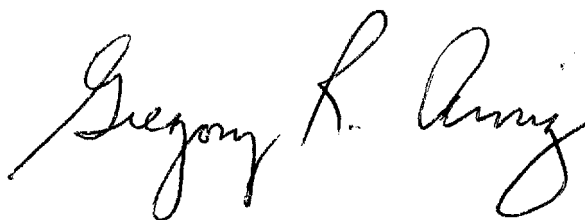
not be useful to organizations whose practices, programs, or services differ from those of ETS.

The Standards are implemented by ETS management through procedural guidelines which provide more detailed and specific guidance for ETS's diverse programs and services. These procedural guidelines are reviewed and revised from time to time by management as new or alternative approaches are developed. Management also reviews special applications that are necessary to meet the needs of particular programs.

ETS believes that the Standards contribute significantly to the quality and utility of its products and services for clients and consumers. ETS does not have complete responsibility or authority, of course, to determine how the Standards will be implemented in activities for which policy is substantially established by a sponsoring group or institution other than ETS. ETS, however, encourages and assists those groups and institutions to implement the Standards as their activities are related to ETS products and services.

ETS reviews all of its programs regularly to assess compliance with the Standards as part of its quality assurance effort. To assist the Trustees to ensure that the Standards are interpreted and applied according to their spirit and purpose, a Visiting Committee of persons outside ETS who are knowledgeable in the specialized aspects of the Standards has been authorized by the Board to review periodically the ETS assessment process. The Committee on Public Responsibility of the ETS Board of Trustees issues a public report annually on how the organization is meeting these Standards.

These efforts reflect ETS's determination to hold itself accountable to high standards of performance in order to safeguard the public interest and the interest of individuals using its products and services.

A handwritten signature in black ink, reading "Gregory R. Anrig". The signature is fluid and cursive, with the first name "Gregory" being the most prominent part.

Gregory R. Anrig
President

CONTENTS

v

	<i>Page</i>
Accountability	1
Confidentiality of Data.	3
Product Accuracy and Timeliness	5
Research and Development	7
Tests and Measurement—Technical Quality of Tests	10
Test Development	11
Test Administration.	13
Test Reliability.	15
Scale Definition.	16
Equating	17
Score Interpretation	18
Test Validity	20
Test Use.	21
Public Information.	23
Glossary	25

ACCOUNTABILITY

1

Principle

ETS acknowledges responsibility for the effective stewardship of its resources to the New York Board of Regents which has issued its corporate charter; to the governing boards that sponsor and set policy for programs or services in which ETS products or services are used; to the individuals and committees that advise ETS with respect to appropriate policy for its programs; to the institutions and agencies that use ETS products and services; to persons who take ETS tests (and parents or guardians of minor persons), submit data for use by ETS or for distribution to others, or participate in research and development projects conducted by ETS; and to the professional associations that are concerned with educational and psychological measurement and research.

Policies

- A. ETS will furnish appropriate information to those to whom it is responsible so they may make informed, independent judgments as to the effectiveness with which ETS exercises its stewardship.
- B. ETS will seek, consider and, as appropriate, act on the views of those who sponsor, use or are affected by ETS programs and services.
- C. ETS will seek to obtain advice on its activities and policies from qualified men and women who are not employed or retained on a regular basis by ETS and who are drawn from appropriate professional disciplines, major philosophies and points of view, different geographic regions, and the major ethnic groups within the relevant population.
- D. ETS will support the activities of professional associations with respect to developing and implementing professional standards or codes, making available the results of current work, and fostering peer review of its activities.

Procedural Guidelines

1. Communicate with sponsors by providing information regularly, by reporting program status in a manner consistent with contractual requirements, and by meeting at least annually so that sponsors can:
 - evaluate ETS services in terms of quality, timeliness, and cost;
 - transmit comments or concerns on which ETS will take prompt and appropriate actions; and
 - express opinions about their program and ETS services directly to senior ETS management.

2. Make available technical and other information about products and services so sponsors, agencies, institutions, or potential users may evaluate and comment on them. Requests for additional information not included in publications should be met within a reasonable time and, if necessary, for a reasonable fee so long as disclosure is consistent with legal, ETS, and sponsor policy, and contractual requirements.
3. Provide information to persons who take ETS tests, submit data for use by ETS, or participate in ETS research and development projects so they will know:
 - the sponsor's identity and responsibility;
 - the nature of the activity or project;
 - the probable use of the product, service, or research; and
 - the address to which comments, questions, or criticisms can be submitted.
4. Direct to legal counsel all proposed new or substantially revised activities for review for compliance with federal statutes, regulations, case law, or state law, as appropriate.
5. Seek advice on program policies and plans, where appropriate, from qualified persons of diverse backgrounds, interests, and experience (e.g., professional disciplines, philosophies, geographic regions, major subgroups, relevant populations of interest) who are not regularly employed by ETS. Inform these individuals about the results of their work within a reasonable period of time.
6. Review publications and other materials to eliminate language or material generally regarded as sexist, racist, or otherwise offensive or inappropriate.
7. Record, process, and report financial information accurately and in accordance with generally accepted accounting principles.
8. Monitor changes in federal statutes, regulations, and case law to assure that ETS activities and operations are in compliance. Compliance with other statutes, regulations, or case law will be evaluated as appropriate.
9. Provide reasonable accommodations with respect to professional responsibilities to permit staff members to attend professional meetings, to contribute to the development of professional standards or codes, to engage in activities of professional interest, and to stay abreast of current developments in related fields.
10. Publish an annual report that provides information about organizational activities and finances.

CONFIDENTIALITY

Principle

ETS recognizes the right of individuals and institutions to privacy with regard to information supplied by and about them that may be stored in data or research files held by ETS and the concomitant responsibility to safeguard information in its files from unauthorized disclosure.

Policies

- A. ETS will ask individuals to provide information about themselves only if it is potentially useful to those individuals, necessary to facilitate processing of data, or serves the public interest in improving understanding of human performance. Insofar as possible, individuals should be informed of the purpose for which the information is requested.
- B. The right of individuals to privacy regarding information about them that may be stored in the data or research files held by ETS extends both to processed information, such as scores based on test-item responses, and the raw data on which the processed information is based.
- C. ETS will protect the confidentiality of data supplied by institutions or agencies about themselves, and so identified, to the extent that such confidentiality does not conflict with ETS's obligations to individuals.
- D. ETS will not collect or maintain in its data or research files any critical information that in its judgment cannot be protected adequately from improper disclosure.
- E. ETS will encourage the organizations with which it works to adopt policies and procedures that adequately protect the confidentiality of the data transferred by ETS to those organizations.

Procedural Guidelines

- 1. Inform individuals or institutions to the extent practical, before information is collected, of the information's intended use and the conditions surrounding its confidentiality and release.
- 2. Use identifiable information about an individual or institution only for designated purposes unless additional consent is obtained. Release identifiable information from ETS only with proper consent or prior agreement, or in a manner that assures the confidentiality of the individual or institution.

3. Make provision for individuals, on presentation of adequate identification (e.g., signature and data file number), to authorize in writing the disclosure of information about themselves from program data files to any appropriate recipient, provided that disclosure does not violate other ETS or sponsor policies or the privacy of other individuals. Authorization by telephone or telegram may be accepted in an emergency. If authorization is from a third party or by prior agreement with the individual, the individual should be notified when disclosure has taken place.
4. Make provision for individuals to obtain information about themselves from data files held at ETS. Such release of information must be consistent with sponsor's policies and be allowed only upon the individual's submission of appropriate identifying information and, if necessary, payment of a reasonable fee.
5. Assure that access to confidential data is safeguarded, especially when such data may be part of a time-sharing network, data bank, or other electronic data processing or storage medium involving units outside ETS.
6. Systematically eliminate information from data files that is out-of-date and of minimal value.
7. Provide identifiable data only in a manner consistent with these guidelines unless served with a subpoena or other court order to provide personally identifiable information. In that event, inform legal counsel, who should make appropriate efforts to narrow the subpoena or to obtain a court order to minimize the dissemination of that information.
8. Inform every organization with which ETS works of the confidentiality of data transferred by ETS to that organization or collected by it on behalf of ETS so that the organization can protect the confidentiality of such data.

PRODUCT ACCURACY AND TIMELINESS

5

Principle

The accuracy of ETS's principal products and the timeliness with which they are made available are important parts of the responsibility ETS has undertaken with respect to its sponsors and the diverse public it serves.

Policies

- A. ETS will establish standards of accuracy and timeliness with respect to each principal product.
- B. ETS will use quality controls that are adequate to assure that its standards of accuracy and timeliness are met.
- C. ETS will make realistic delivery commitments and reasonable efforts to meet those commitments.
- D. ETS will sacrifice the timeliness of the delivery of information if the desired accuracy of that information is substantially in question.
- E. ETS will seek to inform those adversely affected if, subsequent to its release, information has been found not to meet ETS standards of accuracy.
- F. ETS will seek to inform those adversely affected if there is a probability that there will be substantial departure from ETS standards of timeliness with respect to a principal product.

Procedural Guidelines

- 1. Verify that all principal products conform to specifications or standards before release by doing as many of the following as appropriate:
 - independently recomputing or visually inspecting an appropriate sample of each product; or
 - assessing the reasonableness of computed information through reviews by technically competent staff; or
 - reviewing and proofing printed material; or
 - assuring adherence to ETS or professional standards through effective peer review.

2. Verify the accuracy of intermediate products when:
 - the information (e.g., answer keys, conversion parameters, algorithms) is critical to the principal product, or
 - early detection and correction of errors would facilitate meeting delivery schedules of the principal products.
3. Monitor the accuracy, timeliness, and responsiveness of replies to inquiries through periodic audits and other means.
4. Report to a specified ETS staff member all instances in which a product failed to conform to specifications or to standards of accuracy or timeliness. Resolve discrepant conditions before release of the product unless the cognizant ETS officer has approved release to benefit the majority of product users.
5. Correct any critical information found to be in error after its release and promptly distribute corrected information to those adversely affected by the error.
6. Make provision for individuals to verify scores or other information within a reasonable time. Such requests must be accompanied by appropriate identifying information and, if necessary, a reasonable fee.
7. Establish schedules or other process control methods to assure the timely production of each product or service. If it is likely that a product will be late, take steps (e.g., proper notice to test users) to minimize adverse effect.

RESEARCH AND DEVELOPMENT

7

Principle

A continuing program of research and development conducted in compliance with professional standards with respect to quality and ethical procedures is necessary to maintain the high quality and social utility of ETS contributions to education. This includes basic inquiry to increase understanding of educational processes and human development; evaluative and applied research in response to the needs of the educational community; and research and development to improve ETS products and services. Publication of the results of significant ETS research is of benefit to ETS and the profession because it permits others to use, build upon, or improve ETS work.

Policies

- A. ETS will devote appropriate research efforts to improving education through the discovery and conceptual integration of new principles and understanding. This research will be aimed at extending knowledge of the learner and learning processes, of learning environments and educational treatments, of educational institutions, and of the interacting factors that influence human development.
- B. ETS will devote appropriate research efforts to the improvement of the technical quality of ETS products and services. Among the important issues addressed by this research will be problems of test development, reliability, equating, validity, and meaningfulness of interpretation.
- C. ETS will devote appropriate research and development efforts to the identification of needs of the educational community and to the creation, improvement, and evaluation of instruments, systems, and programs of service that meet these needs.
- D. ETS will conduct its research under appropriate procedures that protect the rights of privacy and confidentiality of human subjects or respondents.
- E. ETS will follow procedures to insure that ETS research is of high quality. Standards of quality in research refer to such matters as the identification of relevant data, the choice of suitable methods of collecting and analyzing data, the logic and objectivity of analysis and interpretation, the exploration of relationships between research problems and findings, on the one hand, and existing knowledge, theories, and methodologies on the other, and the thoroughness and care of project planning and management.

- F. ETS will undertake research only if its potential benefits outweigh the inconveniences of or risks to the subjects or respondents who are involved.
- G. ETS will encourage the dissemination of full accounts of ETS research in the usual professional forums and will provide internal means by which the results of ETS research can be published.

Procedural Guidelines

1. Submit proposals for research involving human subjects to the Committee on Prior Review of Research to verify that proper arrangements have been made for the protection of the welfare and rights of human subjects.
2. Conduct research projects involving human subjects or respondents only with the informed consent of the subjects and respondents or, in the case of young children, the consent of a parent, legal guardian, or appropriate institutional representative. Obtain renewed consent or the approval of the Committee on Prior Review of Research for additional data collections or follow-up studies not covered by the original consent agreement.
3. Identify individuals in research files only by code numbers. Keep records linking code numbers to names in a secure location and retain them only as long as necessary.
4. Avoid reporting to subjects, or to institutions providing subjects, the results of experimental situations unless there is little danger of misinterpretation or misuse.
5. Publish or otherwise disseminate the results of research projects unless a justifiable need to restrict dissemination is identified before the research begins.
6. Release identifiable data to researchers outside of ETS only when consent to do so is obtained from the original subjects or from those who consented on their behalf, or when the Committee on Prior Review of Research has approved the release.
7. Have one or more professional(s) with relevant competencies review research proposals and reports to assure that professional standards of quality and ethical conduct are met.
8. Maintain the quality of operational programs by studying the test development process and the development and evaluation of new item types and approaches, the sources of significant differential performance of major subgroups, the fairness and validity of current approaches to aptitude and achievement measurement for major subgroups, reliability theory and practice, equating methods, and measurement techniques and selection and classification models relevant to fairness and validity.

9. Undertake research projects in such areas as learning and cognition, personality and social influence, teacher behavior and instructional programs, socialization and human development, and the economics and sociology of education as a means of improving educational policies and practices.
10. Develop instruments and programs of service in areas such as measurement, institutional and program assessment and evaluation, instruction, guidance, financial aid, certification and licensing, and technology that would be of educational and social utility.

TESTS AND MEASUREMENT— TECHNICAL QUALITY OF TESTS

This section, which deals with ETS testing activities, is divided into seven subsections that are devoted to test development, test administration, reliability, scale definition, equating, score interpretation, and validity.

Principle

High standards of quality and fairness in constructing, administering, reporting, interpreting, and evaluating ETS tests are central to ETS's capability to function effectively as an educational service and research organization.

Policies

- A. ETS will strive to develop tests in which the attributes measured, procedures followed, and criteria used will be unbiased with regard to a heterogeneous group of examinees and appropriate to the use for which the test is designed.
- B. ETS will establish standards for test-administration processes that minimize variations in test performance due to circumstances or conditions not relevant to the attributes being measured.
- C. ETS will establish for its tests a high degree of reliability (accuracy of measurement), consistent with the requirements and the purposes of the test.
- D. ETS will develop scales for reporting scores in a rational fashion, consistent with the requirements and the purposes of the test.
- E. ETS will provide equating systems, when appropriate, for the perpetuation of scales for reporting scores at the highest level of precision practicable.
- F. ETS will make available to sponsors, institutional or agency users, and examinees data for interpreting scores on ETS tests that foster appropriate use of those scores.
- G. Recognizing that test validation is a responsibility of both test users and test developers, ETS will encourage and assist test users in their validation efforts and will itself make available tests that are designed to meet professionally acceptable standards of validity provided the use of such tests is consistent with the primary purposes for which the tests were developed.
- H. ETS will adhere to appropriate professional standards, such as those published in *Standards of Educational and Psychological Tests* and *Principles for the Validation and Use of Personnel Selection Procedures*.

Procedural Guidelines: Test Development

11

1. Obtain substantive contributions to the test development process from qualified men and women who are not on the ETS staff and who represent diverse institutions, population subgroups, perspectives, and professional specialties.
2. Ascertain and document appropriate background information for each test to be developed including:
 - the test's intended purpose and use;
 - the population that will take the test;
 - the nature of the domain to be assessed (e.g., the curricula to be covered by achievement tests, or the relevant elements of training or job requirements for selection tests); and
 - the procedural, financial, or schedule constraints that will influence the developmental process.
3. Prepare, with appropriate advice and review, specifications for each test that cover the following:
 - Content and Skills—the psychological, educational, job, or other domain to be sampled; the relative weight to be given to each part of the domain that is to be measured;
 - Test and Item Format—item types to be used; the level of complexity of language; any special requirements regarding directions and sample items or tests;
 - Psychometric—the intended level of difficulty of the test; the number of items; requirements regarding the target distribution of item difficulties (when using pretested items); requirements regarding the homogeneity of items within each test or subtest and the correlation between subtests or tests; requirements for equating; and the testing time allotted or suggested; and
 - Sensitivity—requirements for material reflecting the cultural background and contributions of major population subgroups.
4. Assure that time requirements are consistent with the test's purpose so that time is not a decisive factor in performance for the large majority of test takers, except for tests designed to measure rate of performance.
5. Have subject-matter and measurement specialists who are familiar with the specifications and purpose of the test and with its intended population review the test items for accuracy, content appropriateness, difficulty, and the adequacy with which the domain is sampled.

12

6. Review individual items, the test as a whole, and descriptive materials to assure that:
 - appropriate technical standards such as those contained in ETS item writers' manuals are met;
 - language, symbols, words, phrases, and content that are generally regarded as sexist, racist, or otherwise potentially offensive, inappropriate, or negative toward major subgroups are eliminated;
 - editorial standards for clarity, accuracy, and consistency are met;
 - clear and complete directions appropriate to the level of understanding of the test takers are provided;
 - typography, format (e.g., test books, screens, tapes), and test-book layout facilitate the task of test takers, including the handicapped; and
 - sufficient sample questions are contained in program publications to characterize the test.
7. Evaluate the performance of individual items and each test edition by:
 - pretesting, reviewing the results of administering similar items to a similar population, or conducting preliminary item analysis before scores are reported;
 - carrying out timely item and test analyses including analyses for reliability, intercorrelation of sections or parts, and speededness; and
 - studying item performance relative to subgroups when the test is new or substantially revised, when the education and experience of subgroups may differ from those of the majority of examinees, and when subgroup members are present in sufficient numbers to permit meaningful analyses.
8. Review tests and test specifications in ongoing programs to assure that:
 - each new test edition is relevant and appropriate to the field, discipline, or curriculum;
 - test editions developed in prior years continue to be sufficiently appropriate for the test-taking population and the subject-matter domain to warrant current use; and
 - major changes in test specifications are followed by appropriate consideration of the implications of score comparability and whether test name changes or other cautions to test users about comparisons with earlier tests are necessary.
9. Review test descriptions contained in publications to assure that they are relevant and appropriate to the editions of the test currently in use.

Procedural Guidelines: Test Administration

1. Provide prospective examinees (and, in some programs, parents or guardians as well) with information in advance of the test administration about the following, as appropriate:
 - the test's intended purpose and what it is designed to measure, typical test items, directions for the test and the answer sheet, strategies for taking the test (e.g., guessing and pacing), and the background and experience relevant to test performance;
 - the program procedures and requirements, including test dates, test fees, test center locations, special testing arrangements for handicapped persons or others, test registration, score reporting, score cancellation by examinees, ETS, or the sponsor, and registering complaints; and
 - test administration procedures and requirements, including those related to identification and admission to the test center; and the consequences of misconduct.
2. Establish test centers that are convenient, nonsegregated, comfortable, and accessible to handicapped individuals. Locate test centers in minority communities, when appropriate and feasible, to improve accessibility to minority examinees.
3. Advise test center staff of the need to make examinees comfortable in the testing situation. Instruct supervisors and staff to be sensitive to the psychological as well as physical needs of examinees. Direct supervisors to include on the test center staff, when appropriate, minority-group members and persons affiliated with other institutions attended by examinees.
4. Provide test center staff with a description of the program, the expected candidate population, the duties of staff, and the procedures for:
 - receiving, storing, and distributing test materials to examinees, and returning them to ETS;
 - admitting examinees to the test center, including ID requirements;
 - administering the test to examinees, including handicapped individuals;
 - using appropriate seating plans and assignments to reduce opportunities for cheating; and
 - handling of suspected cheating, misconduct, or emergencies.
5. Provide test center staff with directions (to be read aloud before the test begins) that cover marking answer sheets, timing of test sections and breaks, guessing strategies, and use of unauthorized aids.

14

6. Utilize effective and equitable procedures for identifying and resolving scores obtained by questionable means.
7. Require supervisors and encourage examinees to report irregularities (e.g., disturbances, mistiming, defective test questions or materials, power failures, or misconduct) so that, after investigation, appropriate action(s) can be taken.
8. Observe a reasonable sample of test administrations to assure that all procedures are followed and that appropriate testing conditions exist.
9. Solicit comments and suggestions from test center staff to provide information to improve future administrations.
10. Make tests available to handicapped individuals through special testing arrangements or special test editions, as appropriate.

Procedural Guidelines: Test Reliability

1. Estimate the reliability or consistency of reported test scores. The method(s) used should be appropriate to the nature and intended use of the test scores and should take into account sources of error considered significant for test score interpretation (e.g., guessing, instability over time, item and content variation, and rater inconsistency).
2. Document the method(s) used to assess the reliability or consistency of the test scores and the rationale for using them; the major sources of error accounted for in the reliability analysis; the formula(s) used and/or appropriate references.
3. Document information about the reliability of test scores including:
 - a reliability coefficient and an overall standard error of measurement, or other equivalent information about the consistency of the test scores;
 - standard errors of measurement or other measures of score consistency for score regions within which decisions about individuals are made on the basis of test scores.
4. Document information about the reliability analysis including:
 - the appropriateness of the analysis sample including the number of observations, means, and standard deviations for the analysis sample(s) and any group(s) for which reliability is estimated;
 - the time intervals between testings if alternate-form or test-retest methods are used;
 - speededness data; and
 - correlations of reported subscores within the same test or test battery.

16

Procedural Guidelines: Scale Definition

1. Define scales for reporting scores that are well constructed throughout their range and in a way that facilitates meaningful score interpretation relative to intended uses of the scores.
2. Determine the number of distinct scale values to be reported in a manner that takes into account the relative importance of avoiding erroneous distinctions among individuals (by reporting different scores for individuals whose true scores are the same) and the need to maintain distinctions that, on the average, will be correct (by reporting different scores for groups of individuals whose average true scores are different).
3. Choose the scale values in a manner that avoids confusion with other scales that are widely used by the same population of score recipients.
4. Document the rationale and the methods used to determine score scales. The methods (e.g., distributive, nondistributive) used should account for the following as appropriate:
 - If examinees' scores derived from different tests in a program are to be directly compared, the scaling method should take into account the differences among groups taking the different tests.
 - If the scale is to be normative, consider the probable length of time and the extent to which the normative information will be appropriate and useful for the intended population.
 - If a test or test battery yields multiple scores for an individual and scaled scores are to be used directly (i.e., without reference to normative data) to interpret performance profiles, the scales should be defined normatively and each should be defined with respect to the same population.
 - If the scale is to be defined with reference to performance standards, those standards should be based on logical or empirical analyses.
5. Avoid reporting raw scores or percentages of questions answered correctly on a test or subtest except under one or more of the following circumstances:
 - only one edition of the test is to be offered;
 - scores on one edition will not be compared with scores on another;
 - raw scores on all editions are comparable; or
 - raw scores are reported in conjunction with a scaled score and in a context that supports appropriate interpretation, such as when furnishing a copy of the test or individual or group responses to the items
6. Redefine an established scale only under compelling circumstances. Provide announcements to all score recipients indicating the change and cautioning recipients against comparisons with earlier scores. If the numerical values are to be changed, change them substantially to minimize confusion between the

Procedural Guidelines: Equating

1. Assure comparability of scores that are derived from different editions of the same test and are used to compare individuals or groups.
2. Document methods used to achieve comparability, including:
 - the consistency between the assumptions underlying the method and the circumstances under which the method is applied. For example, when test editions are equated using common items, make the directions, context, speededness, item placement, and other aspects of the test the same for all examinees; or when anchor scores are based on a test that is not representative of the tests being equated, make sure the groups of examinees used for equating are equivalent;
 - the procedure for linking adequately all editions of the test for which scores should be comparable; and
 - the plans for specially designed studies to collect data to achieve comparability if only a limited number of editions are offered to institutional or other users who will administer and score the tests.
3. Periodically assess the results of methods used to achieve comparability of scores and evaluate the stability of the score scale.

Procedural Guidelines: Score Interpretation

1. Provide score interpretation information for all score recipients in terms that are understandable and useful to each category of score recipient.
2. Provide score recipients with:
 - information concerning the intended use of the test and what it is designed to measure;
 - descriptions of scale properties that affect score interpretation and use;
 - appropriate information concerning the variability of and limitations on the accuracy of test scores (e.g., standard error of measurement), and encourage recipients to take such information into account in making decisions based on scores.
3. Provide score recipients with an appropriate frame of reference for evaluating the performance represented by test scores through information based on norms studies, carefully selected and defined program statistics, or logical analysis. When statistical information is included, the information should be adequately labeled and the nature of the group(s) on which the information was based should be clearly identified.
4. Document the method(s) (e.g., norms studies, derivation of program statistics, cut-score studies) used to develop score interpretation information. Documentation should provide the following types of information, as appropriate:
 - the characteristics of the scale;
 - the method of selecting participants on which the data are based, including information about representation of relevant major subgroups within the defined population;
 - the period in which the data were collected;
 - the participation rate of categories of individuals or institutions and their characteristics such as the age, sex, or subgroup composition of the group and whether or not the participants were self-selected;
 - weighting systems used;
 - estimates of sampling error and possible effects of nonparticipation; and
 - comparisons with relevant data on variables from other sources when possible.
5. Revise norms or other score interpretation information at sufficiently frequent intervals to assure its continued appropriateness as a frame of reference for evaluation of performance represented by test scores.

6. Compile descriptive statistics periodically from samples or from the entire population to monitor the participation and performance of major subgroups.
7. Provide institutional or agency score recipients with information as appropriate to assist them in using scores in conjunction with other information, setting cut scores, interpreting scores for major subgroups, conducting local norms studies, and developing local interpretative materials.
8. Avoid developing interpretative information for subgroups unless sufficient data was obtained on each subgroup to make the information meaningful, the information can be accompanied with a carefully described rationale (e.g., guidance purposes) for using it, and the information can be presented in a way that discourages incorrect interpretation and use.
9. Caution score recipients, when appropriate, that scores for different tests offered by a program may not be equivalent even though the scores are reported on similar scales.

Procedural Guidelines: Test Validity

1. Provide evidence of the validity of test scores relative to their principal purpose(s) or intended use(s) in terms of the following three components of test validity as appropriate and feasible:
 - content validity, based on an analysis of (1) the domain(s) of interest, (2) the relative importance of topics within the domain, and (3) the appropriateness of the knowledge or behavior sampled by the test, and the adequacy with which the test samples the defined domain;
 - construct validity, based on the logical and empirical analysis of (1) processes underlying performance on the test, including appropriate cognitive and noncognitive functions, (2) the relationship, if any, between test scores and other variables implied by intended interpretations; and (3) sources of construct-irrelevant difficulty that would jeopardize the intended interpretation;
 - criterion-related validity, based on statistical relationships between test scores and as many distinct, valid, and reliable performance variables as necessary to evaluate the test score's predictive effectiveness. Interpretations of these relationships should take into account sample size, reliability and validity of criterion measures, possible restriction of range of scores on the variables, and other contextual factors.

If evidence for one or more of these validity components is not provided, delineate the rationale for not providing it in the particular circumstances.
2. Document fully the methods by which validation is accomplished including, as appropriate:
 - descriptions of the procedures employed in any study;
 - the number and qualifications of any experts who made judgments about the domain or the appropriateness of test content;
 - the nature and reliability of appropriate criteria and possible sources of error;
 - descriptions of the test takers; and
 - descriptions of materials surveyed.
3. Undertake new validity studies whenever the test or the performance domain sampled is substantially revised.
4. Validate the tests separately for major subgroups of the population of interest, when appropriate and feasible.
5. Establish test names that imply no more than the test validity justifies.
6. Provide information to users to help them plan and conduct validity studies.

TEST USE

21

Principle

Proper and fair use of ETS tests is essential to the social utility and professional acceptance of ETS work.

Policies

- A. ETS will set forth clearly to sponsors, institutional or agency users, and examinees the principles of proper use of tests and interpretation of test results.
- B. ETS will establish procedures by which fair and appropriate test use can be promoted and misuse can be discouraged or eliminated.

Procedural Guidelines

- 1. Provide score recipients with adequate descriptions of proper test uses and caution them against potential misuses.
- 2. Encourage, in program publications, uses of test scores that take into account examinees' opportunities to learn as well as other relevant information about them.
- 3. Provide users with information and opportunities for consultation about intended test use, test content, test difficulty, and relevant research that will allow them to make good judgments about appropriate uses of the tests offered by the program.
- 4. Advise users that when using test scores in conjunction with distinguishing characteristics, such as sex, subgroup membership, or curricular emphasis or training, such uses should be carefully and rationally developed.
- 5. Advise users that whenever individuals are assigned to groups on the basis of test scores, the performance of those individuals and the continued appropriateness of assignment criteria should be reviewed frequently.
- 6. Stress to users that pass-fail or cut-off-score policies should be based on a carefully developed rationale or explanation and that such policies should be reexamined periodically to assure fair selection across major subgroups.

22

7. Investigate complaints or allegations of improper score use. When a misuse is verified, advise the sponsor and the user and seek voluntary correction. If efforts to achieve voluntary correction are not successful, ETS and the sponsor should determine whether to continue services to the misuser. Maintain records of complaints and their disposition.
8. Develop special publications to promote fair use of tests and to discourage misuse.

PUBLIC INFORMATION

Principle

ETS is dedicated to promoting public understanding of testing, measurement, and related educational issues by providing programs of public information, research, and advisory and instructional activities.

Policies

- A. ETS will promote understanding of the purposes and procedures of testing and the proper uses of test information among examinees, test users, and the general public; ETS will encourage sponsors to undertake similar efforts.
- B. ETS will adhere to high professional and ethical standards in both the promotion and the use of its products and services and in the dissemination of information to examinees, test users, and the general public; ETS will encourage sponsors and other organizations to do so.
- C. ETS will provide instruction and technical assistance in testing, measurement, evaluation, and related areas.
- D. ETS will disseminate the results of research on testing, measurement, and other related educational issues and will make ETS-controlled nonproprietary data available to other researchers; further, ETS will encourage other organizations to do the same.
- E. ETS will respond promptly and appropriately to requests for advice and technical assistance related to programs and services offered by ETS, to purposes and procedures for testing, to uses and misuses of test information, and to complaints about its services.
- F. ETS will collect reference materials relating to tests, measurement, evaluation, and related research, and will make its collections available to professional groups, organizations, and interested individuals.

Procedural Guidelines

- 1. Develop and disseminate publications and other materials to promote proper test use, discourage misuse, and improve public understanding of testing, measurement, and related educational issues directly and in collaboration with sponsors.

24

2. Convene periodically groups of test users, measurement specialists, representatives of professional groups, and other interested parties to examine ETS procedures and recommend improvements in them.
3. Provide accurate and appropriate information when marketing ETS products and services.
4. Provide advice and technical assistance on tests and measurement for test sponsors, users, and other interested groups.
5. Offer conferences, seminars, workshops, and other forms of training or instruction in testing, measurement, and other relevant areas of interest, acting independently or in cooperation with other institutions or professional groups.

GLOSSARY OF TERMS

Accuracy: The extent to which a principal product conforms to its specifications.

Client: (See Sponsor)

Consent: Permission granted by an individual or that individual's parent or guardian to the use or release of data held by ETS; such permission granted upon receipt of a reasonable explanation of the purpose of the use or release and a reasonable explanation of the manner in which the results will be reported.

Critical Information: Information that will be used to draw important inferences (a) about the sponsor, ETS-appointed external committees, institutional or agency user, examinee, subject or respondent, or (b) by the sponsor, institutional or agency user, examinee, subject or respondent and which, if incorrect, could be harmful.

ETS Board of Trustees: The ETS Board of Trustees is the governing body of ETS. There are 17 trustees. Sixteen are elected for four-year terms. New members of the Board are elected by current trustees. The President of ETS is an *ex officio* member.

ETS-held Program Data Files: Information about individuals and institutions held by ETS and derived from ETS-provided services of collection, processing, storage, retrieval and dissemination.

ETS-held Research Files: Information held by ETS and generated through ETS-conducted research intended to result in the development of new or improved techniques and materials for application in such areas as classroom instruction, evaluation of progress toward educational goals, counseling of students, and decision-making of school administrators.

Examinee: An individual who takes a test, developed and or administered by ETS.

Institutional or Agency User: An organizational recipient of ETS-processed or produced information.

Intermediate Product: Materials that are not released externally, but that are necessary to the production of the principal product.

Principal Product: ETS-produced or processed materials (e.g., annual reports, performance data, score reports and admissions tickets) that are released or transmitted to a sponsor, ETS-appointed external committee, institutional or agency user, examinee, subject or respondent, pursuant to a contract or published commitment.

Principles for the Validation and Use of Personnel Selection Procedures, Division of Industrial-Organizational Psychology, American Psychological Association, Berkeley, CA: The Industrial-Organizational Psychologist, 1980.

Respondent: An individual who provides data to a research project in a manner and for a purpose different from either examinees or subjects.

Sponsor: Educational, professional or occupational associations, federal, state or local agencies, public or private foundations which contract with ETS for its services. This category includes their governing boards, membership, and appointed committees or staff.

Standards for Educational and Psychological Tests, American Psychological Association (APA), American Educational Research Association, and National Council on Measurement in Education. Washington, D.C.: APA, 1974.

Subgroup: A part of the larger population which is definable according to various criteria as appropriate, (e.g., by sex, race or ethnic origin, training or formal preparation, geographic location, income level, handicap and/or age).

Subject: An individual who participates in an ETS laboratory or experimental research project.

Testing Program: A set of arrangements under which examinees are scheduled to take a test under standardized conditions, the tests are supplied with instructions for giving and taking them, and arrangements are made for scoring the tests, reporting the scores, and providing interpretative information as part of a comprehensive ongoing service. A program is characterized by its continuing character and by the inclusiveness of the services provided.

Timeliness: The degree to which a principal product is released or delivered to its recipient within a predefined schedule.

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AND FAIRNESS

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